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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/668,855 | 09/23/2003 | Torsten Niederdrank | P03,0381 (26965-3031) | 3145 |
| 26574 | 7590 | 04/10/2008 | | |
| SCHIEF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473 | | | EXAMINER LAO, LUN S | |
| | | | ART UNIT 2615 | PAPER NUMBER |
| | | | MAIL DATE 04/10/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/668,855

Applicant(s)

NIEDERDRANK ET AL.

Examiner

LUN LAO

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 02-06-2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

1 This action is in response to the amendment filed on 06-12-2007. Claims 2 and 9 have been amended. Claims 1-14 are pending.

Transitional After Final Practice

2. Since this application is eligible for the transitional procedure of 37 CFR 1.129(a), and the fee set forth in 37 CFR 1.17(r) has been timely paid, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a). Applicant's Appeal Brief submission after final filed on 01-28-2008 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Nielsen et al. (US PAT. 5,091,952).

Consider claim 1 Nielsen teaches a device for feedback compensation in hearing devices (see fig.2), comprising:

- a signal input device (1) configured to acquire an input signal that is influenced by a feedback (acoustic feedback);

- a feedback reduction device (7-8, 21, 25) for adjustable reduction, compensation, or damping of the feedback, and

- a signal output device (5) configured to output an output signal with a reduced feedback portion; and

- an estimation unit (8,49) that is connected between the signal input device (1) and the feedback reduction device (7-8, 21, 25) and with which an estimated value of a system distance that defined by a distance of loop gain of the feedback system to its predetermined stability limit can be determined from the input signal (it is inherent that the stability limit is related to the distance loop gain of the feedback system; see fig. 2), such that parameters of the feedback reduction device are controllable using the estimated value (see figs 2-3 and col.6 line 15-col. 7 line 67).

Consider claim 8 is essentially similar to claim 1 is rejected for the reason state above apropos to claim 1.

Consider claim 2 Nielsen teaches that the estimation device is configured to detect a first signal portion (see fig.2, (20)) and a second signal portion (23) from the input signal, to generate an estimated signal from the first signal portion for the second signal portion utilizing a model (8) from the first signal portion, and to determine an estimated

value from a difference of the estimated signal and the second signal portion (see fig. 2 and col.5 line 9- 67)..

Consider claims 3-4 Kates teaches the first signal portion (see fig.2 (20)) corresponds to a high-frequency portion of the input signal, and the second signal portion (23) corresponds to a low-frequency portion of the input signal (see fig. 2 and col.5 line 9- 67); and the estimation device comprises a feature extractor configured to extract features from the first and second signal portions for further processing (see fig. 2 and col.5 line 9- 67).

Consider claims 9-11 are essentially similar to claims 2-4 and are rejected for the reason state above apropos to claims 2-4.

Consider claims 5-6 Nielsen teaches that the feedback reduction device comprises a feedback compensator (see fig. 2 and col.5 line 9- 67), and the feedback reduction device comprises an amplification/compression control (see fig. 2 and col.5 line 9- 67).

Consider claims 12-13 are essentially similar to claims 5-6 and are rejected for the reason state above apropos to claims 5-6.

Consider claim 7 Nielsen teaches that the feedback reduction device comprises at least one oscillation detector (see fig. 2 (49)) and at least one narrow-band filter (8) device to suppress oscillations based on the estimated value (see figs 2-3 and col.6 line 15-col. 7 line 67).

Consider claim 14 is essentially similar to claim 7 is rejected for the reason state above apropos to claim 7.

Response to Arguments

5. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fang (US 6,480,610) is cited to show other related the feedback compensation for hearing devices with system distance estimation.

7. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(703) 872-9306

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Art Unit: 2615

Lao, Lun-See
/Lun-See Lao/
Examiner, Art Unit 2615
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501

Date: 04-03-2008

/Vivian Chin/

Supervisory Patent Examiner, Art Unit 2615